

1 CLAIMS

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3 What is claimed is:

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5 Claim 1. A method for inhibition of corrosion of a
6 metal which experiences active-passive transition in contact
7 with an electrolyte comprising:

8 incorporating one or more hydrogen peroxide donors with
9 said electrolyte at a concentration effective to inhibit
10 corrosion.

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12 Claim 2. The method in accordance with claim 1 wherein
13 said hydrogen peroxide donors are selected from the group
14 consisting of hydrogen peroxide, sodium peroxide, potassium
15 peroxide, calcium dioxide, sodium percarbonate, potassium
16 percarbonate, sodium perborate, potassium perborate or
17 mixtures thereof.

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19 Claim 3. The method in accordance with claim 1 wherein
20 said metal is selected from the group consisting of steel(s),
21 aluminum, titanium or mixtures thereof.

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23 Claim 4. A method for inhibition of corrosion of a
24 metal which experiences active-passive transition in contact

1 with an electrolyte comprising:

2 incorporating one or more peroxycarboxylic acid or
3 constituents thereof with said electrolyte at a concentration
4 effective to inhibit corrosion.

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6 Claim 5. The method in accordance with claim 4 wherein
7 said metal is selected from the group consisting of steel(s),
8 aluminum, titanium or mixtures thereof.

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10 Claim 6. The method in accordance with claim 4 wherein
11 said peroxycarboxylic acids are formed from acids selected
12 from the group consisting of formic acid, acetic acid, citric
13 acid, oxalic acid, gluconic acid, glucoheptonic acid,
14 succinic acid, acrylic acid, polyacrylic acid, maleic acid,
15 polymaleic acid, polyepoxysuccinic acid, ethylene-diamine-
16 tetraacetic acid, malonic acid, adipic acid,
17 phosphonobutanepolycarboxylic acid and mixtures thereof.

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19 Claim 7. A method of inhibition of corrosion during
20 removal of deposits from a metal which experiences active-
21 passive transition while in contact with an electrolyte
22 comprising:

23 incorporating one or more peroxycarboxylic acids or
24 their constituents with said electrolyte at a concentration

1 effective to inhibit corrosion.

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3 Claim 8. The method in accordance with claim 7 wherein
4 said metal is selected from the group consisting of steel(s),
5 aluminum, titanium or mixtures thereof.

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7 Claim 9. The method in accordance with claim 7 wherein
8 said peroxy-carboxylic acids are formed from acids selected
9 from the group consisting of formic acid, acetic acid, citric
10 acid, oxalic acid, gluconic acid, glucoheptonic acid,
11 succinic acid, acrylic acid, polyacrylic acid, maleic acid,
12 polymaleic acid, polyepoxysuccinic acid, ethylene-diamine-
13 tetraacetic acid, malonic acid, adipic acid,
14 phosphonobutanepolycarboxylic acid and mixtures thereof.

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